

ABSTRACT OF THE DISCLOSURE

The resolution, in terms of numbers of pixels in horizontal and vertical directions, and frame rate, in terms of frames per second, of video data are converted by assembling a group of the frames within an input buffer, by applying a direct DCT to data from each line of pixels extending along a scan line and among scan lines, perpendicular to the scan lines, and to a line of pixels extending at each pixel position among the group of frames, and by applying an interpolating inverse DCT to coefficients generated by the direct DCT. Preferably, to prevent the formation of artifacts, the application of the direct DCT to data from a line of pixels is interrupted when a difference in a coordinate data value between adjacent pixels exceeds a threshold limit.